

REMARKS

Claim Objections

The examiner has objected to claims 15-22 under 37 C.F.R. § 1.75 (c), as being of improper dependent form for failing to further limit the subject matter of a previous claim.

Applicants have amended claims 15-23 to place the claims in proper dependent form.

In view of the foregoing, Applicants respectfully request the Examiner to withdraw the objections to claims 15-23 under 37 C.F.R. § 1.75 (c).

Claim Rejections 35 U.S.C. § 112, second paragraph

The Examiner has rejected claims 14-23 under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention.

Applicants have amended claims 15-23 to more particularly point out and distinctly claim the subject matter which Applicants regard as the invention.

In view of the foregoing, Applicants respectfully request the Examiner to withdraw the rejections to claims 14-23 under 35 U.S.C. § 112, second paragraph.

Claim Rejections 35 U.S.C. § 102 (b)

Claims 14-23

The Examiner has rejected claims 14-23 under 35 U.S.C. § 102 (b) as being anticipated by Dudley et al. (US 5,272,302).

The Examiner has also rejected claims 14-23 under 35 U.S.C. § 102 (b) as being anticipated by Strauss et al. (US 5,932,075).

Applicants respectfully disagree with the Examiner. Applicants have amended claims 14-23. Support is provided by paragraphs [0026]-[0034] in the specification.

Claim 14, as amended, claims an apparatus including: a magnetron (190), the magnetron capable of generating microwave energy (180) and sweeping frequency of the microwave energy; a waveguide (195) located near the magnetron, the waveguide coupled to an input aperture, the waveguide capable of transmitting the microwave energy; a stirrer (210) located near the waveguide, the stirrer capable of linear and rotational motion, the stirrer formed of a material that reflects said microwave energy, the stirrer to mix the microwave energy; a susceptor (200) located near the stirrer, the susceptor capable of linear motion and rotational motion, the susceptor formed of a material that does not absorb the microwave energy, the susceptor to further mix the microwave energy; and a self-aligned mechanical joint (225) held by the susceptor, the self-aligned mechanical joint located on a conveyor belt (not shown), the self-aligned mechanical joint located in an inert atmosphere, the self-aligned mechanical joint exposed to the microwave energy, the self-aligned mechanical joint including: a bump (155) located on a die

Serial No.: 10/624,830

Attorney's Docket No.: 42P12684C

(100), the die capable of absorbing the microwave energy, the microwave energy capable of being transformed into heat by molecular excitation; and a solder alloy located on a substrate (170), the solder alloy capable of reflow by the heat through conduction from the bump. See Figures 2 (a) – (b).

Neither of the 2 references cited by the Examiner teaches each and every element of Applicants' invention, as claimed in claim 14, as amended. The elements that are not taught by the 2 cited references include microwave energy with variable frequency that is swept, conveyor belt, and inert atmosphere. Consequently, neither of the 2 references anticipates Applicants' invention.

Claims 15-23 are dependent on claim 14, as amended, and, thus, are also not anticipated by either of the 2 references cited by the Examiner.

In view of the foregoing, Applicants respectfully request the Examiner to withdraw the rejections to claims 14-23 under 35 U.S.C. § 102 (b).

CONCLUSION

Applicants believe that all claims pending, including claims 14-23, are now in condition for allowance so such action is earnestly solicited at the earliest possible date.

Pursuant to 37 C.F.R. 1.136 (a) (3), Applicant hereby requests and authorizes the U.S. Patent and Trademark Office to treat any concurrent or future reply that requires a petition for extension of time as incorporating a petition for extension of time for the appropriate length of time.

Should there be any additional charge or fee, including a Request for Continued Examination, an extension of time fee, or other fees under 37 C.F.R. 1.16 and 1.17, please charge Deposit Account No. 50-0221.

Serial No.: 10/624,830

Attorney's Docket No.: 42P12684C